

Question	Answer
10.	$D(-4, 3); E(0, 4)$ ; slope of $\overline{DE} = \frac{1}{4}$ ; slope of $\overline{CB} = \frac{1}{4}$ ; since the slopes are the same, $\overline{DE} \parallel \overline{CB}$ . $DE = \sqrt{17}$ ; $CB = \sqrt{68} = 2\sqrt{17}$ ; the length of $\overline{DE}$ is half the length of $\overline{CB}$ .
13.	19
15.	$55^\circ$
17.	Yes; $\overline{DE}$ is a midsegment of $\triangle ABC$ , so its length is half of $4\frac{1}{2}$ ft, or $2\frac{1}{4}$ ft, which is 27 in. This is less than 30 in. So the carpenter can use the 30 in. timber to make the crossbar.
18.	34
22.	26.5
37a.	2.25 mi
37b.	28.5 mi